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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/683,752	10/10/2003	· Stephen Gold	200309332-1	5052
22879 7590 HEWLETT PACKA	· 02/26/2007 ARD COMPANY	EXAMINER		
P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			DILLON, SAMUEL A	
			ART UNIT	PAPER NUMBER
			2185	
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SHORTENED STATUTORY PERI	IOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MONTHS 02/26/2007		02/26/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
·						
Office Action Summary	10/683,752	GOLD ET AL.				
· Office Action Cammary	Examiner	Art Unit				
The MAILING DATE of this assessmine the	Sam Dillon	2185				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>08 January 2007</u> .						
• —	<u> </u>					
• ==	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	•					
6)⊠ Claim(s) <u>1-20</u> is/are rejected.						
7) Claim(s) is/are objected to.		•				
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on 10 October 2003 is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
a) ☐ All b) ☐ Some c) ☐ None of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)						
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:						

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#### **DETAILED ACTION**

1. The Examiner acknowledges the applicant's submission of the amendment dated January 8, 2007. Per the amendment, Claims 1, 10, 18 and 20 have been amended.

2. The instant application having Application No. <u>10/683,752</u> has a total of 20 claims pending in the application; there are 3 independent claims and 17 dependent claims, all of which are ready for examination by the examiner.

# I. RESPONSE TO AMENDMENT(S) / ARGUMENT(S)

- 3. In response to the amendment, the objection to <u>Claim 18</u>, the 35 U.S.C. 112 second paragraph rejections of <u>Claims 10 and 20</u> and the 35 U.S.C. 101 rejections of <u>Claims 1-11</u> as stated in the previous action are **withdrawn**.
- 4. Applicant's arguments (pages 10-14 of response dated January 8, 2007) with respect to the 35 U.S.C. 103(a) rejections of Claims 1-20 have been fully considered but they are **not persuasive**. The Applicant is directed below for traversal.
- 5. Regarding <u>Claims 1, 12 and 17</u>, the Applicant contends that neither Legato nor Cox provide the suggestion or incentive required to combine in the manner required. The Examiner respectfully disagrees.

The Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Accordingly, the Examiner notes that the teaching, suggestion or motivation must be

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found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See MPEP 2143.01 [].

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In this case, Legato discloses a system whereby the status of each of a plurality of storage devices involved in data backup operations is determined and either recorded or displayed (page 93, "NS Server Statistics"). Cox discloses extrapolating an aggregate status based on a collection of resources (column 1 lines 50-56).

Firstly, Cox explicitly discloses that his method provides an accurate assessment of the operability status of an aggregate resource (column 4 lines 1-8). As such, his method could provide an accurate single element assessment of the operability status of the Legato system.

Secondly, Cox inherently implies that creating a single aggregate status indicator is desirable, in that it is problem that others have attempting and that Cox intends to improve upon (see column 2 lines 21-45). Cox's invention is directed towards compiling a collection of indicators down to a single indicator for the purposes of determining the status of the aggregate resource as a whole, not as a list of individual indicators, and implies that the process of determining whether the aggregate resource is in a "degraded", "severely degraded" and "unsatisfactory" conditions is provided for viewing by an operator.

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Thirdly, the Examiner asserts that, at the time of the invention, a person having ordinary skill in the art would have recognized the desirability of creating a single status indicator for the entire system. This status indicator can be used to provide an overall summary of a system's status, which is useful for quick viewing, report generation, system summaries, notifications, etc. For referential support, Cox makes reference to <u>Downes</u> et al. (*US Patent 4*,769,761) as being a prior art implantation of a system attempting to solve to same problem with which Cox was concerned. Downes discloses it being desirable to use an aggregate threshold system so as to only alert an operator during occasions of excessive error (*column 2 lines 38-46*).

Accordingly, the Examiner respectfully asserts that Cox explicitly and implicitly discloses a suggestion or incentive to combine in the manner stated and that the suggestion or incentive to combine in the manner stated would have been clearly recognizable to a person having ordinary skill in the art at the time of the invention.

- Regarding <u>Claims 1, 12 and 17</u>, the Applicant contends that <u>Legato and Cox's "stored parameter values"</u> cannot be the same as a "service level objective". The Examiner respectfully disagrees. Merriam-Webster defines an objective to be "something toward which effort is directed: an aim, goal or end of action" (<a href="http://m-w.com/dictionary/objective">http://m-w.com/dictionary/objective</a>). The Examiner respectfully asserts that the parameters being used as thresholds to modify the 'service' status is analogous to a service level objective.
- 7. Regarding Claims 1, 12 and 17, the Applicant contends that Legato and Cox's "aggregate resource" cannot be a "media job category". The Examiner respectfully disagrees. Merriam-Webster defines a category to be "any of several fundamental and distinct classes to which entities or concepts belong" (<a href="http://m-w.com/dictionary/category">http://m-w.com/dictionary/category</a>). An aggregate resource is not an actual physical resource itself, but rather a conceptualization of a mathematical set of actual physical resources, and as such it can be interpreted as being a

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class to which entities (resources) belong. Accordingly, the Examiner respectfully asserts that the aggregate resource can be interpreted as being a media job category, as each resource inherently pertains to media jobs.

8. Regarding all other Claims not specifically traversed above and whose rejections were upheld, the Applicant contends that **the listed claims are allowable by virtue of their dependence on other allowable claims**. As this dependence is the sole rationale put forth for the allowability of said dependent claims, the Applicant is directed to the Examiner's remarks above. Additionally, any other arguments the Applicant made that were not specifically addressed in this Office Action appeared to directly rely on an argument presented elsewhere in the Applicant's response that was traversed or found persuasive above.

## II. REJECTIONS BASED ON PRIOR ART

## Claim Rejections - 35 USC ' 103 - Legato and Cox

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. <u>Claims 1-20</u> are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Legato</u> et al. ("Legato NetWorker Administrator's Guide") in view of <u>Cox</u> et al. (US Patent Number 5,535,335).
- 11. As per <u>Claims 1, 12 and 17</u>, but more specifically to <u>Claim 12</u>, <u>Legato</u> disclose a system ("NetWorker Storage Management", page 37) comprising:

logic, communicatively coupled to a user interface (NetWorker administrator interface, page 93 "NW Server Statistics"), to determine a status for each of a plurality of media jobs associated with a media job category (commands mminfo and nsrmm, page 93); and

wherein said user interface is further configured to provide the status indicators (NetWorker administrator interface, page 93 "NW Server Statistics").

Legato does not disclose receiving a service level objective for a media job category and determining a status indicator for the media job category based on the service level objective and the status for each of the plurality of media jobs; and wherein said user interface is further configured to provide the status indicator for the media job category.

<u>Cox</u> discloses a service level objective (column 2 lines 30-32) for a media job category (aggregate resource, column 2 lines 9-11); determining a status indicator for the media job category based on the service level objective and the status for each of the plurality of media jobs (column 2 lines 25-48).

Legato and Cox are analogous art in that they both deal with a collection of items each having a status and those statuses being queried. At the time of the invention, it would have been obvious a person having ordinary skill in the art to modify Legato's device management system to support Cox's aggregate status reporting.

The motivation for doing so, as taught by Cox, would have been to provide an accurate assessment of the operability status of the aggregate resource (Cox, column 4 lines 1-8).

Therefore, it would have been obvious to combine Legato's system with Cox's reporting for the benefit of a providing an accurate assessment of the system status, to obtain the invention of Claims 1-12.

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12. As per <u>Claim 2, 11 and 20</u>, but more specifically to <u>Claim 2</u>, <u>Legato</u> and <u>Cox</u> disclose the method of <u>Claim 1</u>, wherein

determining a status comprises determining whether each of the plurality of media jobs completed within a due time for each respective media job (Legato, if the job completed then the status will not be "susp", page 141).

- 13. As per Claim 3, Legato and Cox disclose the method of Claim 1, wherein receiving a service level objective comprises receiving a first desired percentage of media jobs to be completed within a due time associated with the media job (Cox, 2<sup>nd</sup> parameter, column 2 lines 38-48).
- 14. As per <u>Claim 4, 15-16 and 18</u>, but more specifically to <u>Claim 4</u>, <u>Legato</u> and <u>Cox</u> disclose the method of <u>Claim 3</u>, wherein providing a status indicator comprises:

calculating a calculated percentage of the plurality of media jobs that were completed within the due time associated with the media job (Cox, col. 2 lines 38-48);

if the calculated percentage is less than the first desired percentage, providing a critical status indicator (Cox, "severely degraded", column 2 line 45).

- 15. As per Claim 5, Legato and Cox disclose the method of Claim 3, further comprising receiving a second desired percentage of media jobs to be completed within the due time associated with the media job, the second desired percentage greater than the first desired percentage (1st parameter, column 2 lines 38-48).
- 16. As per <u>Claim 6</u>, <u>Legato</u> and <u>Cox</u> disclose the method of <u>Claim 5</u>, wherein providing a status indicator comprises:

calculating a calculated percentage of the plurality of media jobs that completed within the due time associated with the media job (Cox, value of underlying real resource elements found in an unsatisfactory state, column 2 lines 38-48);

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if the calculated percentage is less than the first desired percentage, providing a critical status indicator (Cox, "severely degraded", column 2 lines 38-48);

if the calculated percentage is greater than the first desired percentage and less than the second desired percentage, providing a warning status indicator (Cox, "degraded", column 2 lines 38-48); and

if the calculated percentage is greater than the second desired percentage, providing an OK status indicator (Cox, not degraded, column 2 lines 38-48).

17. As per <u>Claims 7 and 19</u>, but more specifically to <u>Claim 7</u>, <u>Legato</u> and <u>Cox</u> disclose the method of <u>Claim 1</u>, further comprising:

receiving a second service level objective comprising a desired percentage of media to have a known location (Legato, not in progress / inpro, page 140);

calculating a calculated percentage of media of a total number of media having a known location (Cox, column 2 lines 38-48); and

providing a second status indicator for media having a known location based on the calculated percentage and the second service level objective (Cox, column 2 lines 38-48).

18. As per <u>Claim 8</u>, <u>Legato</u> and <u>Cox</u> disclose the method of <u>Claim 1</u>, wherein providing a status indicator comprises

providing one of a critical status, a warning status, and an OK status (Cox, column 2 lines 38-48).

19. As per <u>Claims 9-10 and 14</u>, but more specifically to <u>Claim 9</u>, <u>Legato</u> and <u>Cox</u> disclose the method of Claim 1, wherein

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the media job category comprises one of a media movement category, a device load category (Legato, each status is of a device that had data loaded or attempted to load on it, page 140 paragraph 1), and a scratch media initialization category.

20. As per Claim 13, Legato and Cox disclose the system of Claim 12, further comprising:

media job information comprising a plurality of media jobs associated with the

media job category, each of the plurality of media jobs having a due time (Legato, save

sets, page 140); and

wherein said logic is to determine the status using said media job information (Legato, status is determined based on information from save sets, page 140).

#### III. RELEVANT ART CITED BY THE EXAMINER

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

<u>Downes</u> et al. *(US Patent 4,769,761)* discloses it being desirable to use an aggregate threshold system so as to only alert an operator during occasions of excessive error *(column 2 lines 38-46)*.

#### IV. CLOSING COMMENTS

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

## a. STATUS OF CLAIMS IN THE APPLICATION

23. The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. ' 707.07(i):

## a(1). CLAIMS REJECTED IN THE APPLICATION

24. Per the instant office action, <u>Claims 1-20</u> have received an action on the merits and are subject of a final action.

# b. **DIRECTION OF FUTURE CORRESPONDENCES**

- 25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to <u>Sam Dillon</u> whose telephone number is <u>571-272-8010</u>. The examiner can normally be reached on 9:30-6:00.
- 26. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, <u>Sanjiv Shah</u> can be reached on <u>571-272-4098</u>. The fax phone number for the organization where this application or proceeding is assigned is <u>571-273-8300</u>.

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## **IMPORTANT NOTE**

27. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sam Dillon Examiner Art Unit 2185

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